Contents **Volume 267**

RICHARD ARENS (Los Angeles, California) AND MOSHE GOLDBERG (Haifa, Israel)
Multilinear Operators and Weighted l_1 Norms 1

BERND FRITZSCHE, BERND KIRSTEIN, AND VERA KRUG (Leipzig, Germany)
On Arov-Normalized j_{qq}-J_q-elementary factors 11

LUCA GEMIGNANI (Pisa, Italy)
A Fast Algorithm for Generalized Hankel Matrices Arising in Finite-Moment Problems 41

ZHI-MING WU AND WEI-MIN LIU (Indianapolis, Indiana)
Criterion of High-Codimensional Bifurcations With Several Pairs of Purely Imaginary Eigenvalues 53

BRUNO CODENOTTI (Pisa, Italy), VALENTINO CRESPI (Milano, Italy), AND GIOVANNI RESTA (Pisa, Italy)
On the Permanent of Certain (0, 1) Toeplitz Matrices 65

J. MAROULAS AND P. PSARRAKOS (Athens, Greece)
The Boundary of the Numerical Range of Matrix Polynomials 101

TOSHIYUKI KOHNO, HISASHI KOTAKEMORI, HIROSHI NIKI, AND MASATAKA USUI (Okayama, Japan)
Improving the Modified Gauss-Seidel Method for Z-Matrices 113

GILLES PISIER (Paris, France)
Quadratic Forms in Unitary Operators 125

STEFANO SERRA (Pisa, Italy)
The Extension of the Concept of the Generating Function to a Class of Preconditioned Toeplitz Matrices 139

MICHAEL G. NEUBAUER (Northridge, California)
An Inequality for Positive Definite Matrices With Applications to Combinatorial Matrices 163

B. N. COOPERSTEIN (Santa Cruz, California)
External Flats to Varieties in $\mathbb{P}\mathbb{G}(M_{n,n}(\mathrm{GF}(q)))$ 175

FABIO DI BENEDETTO (Genova, Italy)
Generalized Updating Problems and Computation of the Eigenvalues of Rational Toeplitz Matrices 187

Table of Contents continues

Table of Contents continued

KARABI DATTA, YOOPYO HONG (DeKalb, Illinois), AND RAN BAIK LEE (Kwan-Ju, Korea)
Applications of Linear Transformations to Matrix Equations 221

HISASHI ITO (Chiba, Japan)
A New Statement About the Theorem Determining the Region of Eigenvalues of Stochastic Matrices 241

BERESFORD N. PARLETT AND INDERJIT S. DHILLON (Berkeley, California)
Fernando's Solution to Wilkinson's Problem: An Application of Double Factorization 247

ZHONG-ZHI BAI (Beijing, People's Republic of China)
Parallel Hybrid Algebraic Multilevel Iterative Methods 281

J. A. HILLMAN, B. R. F. JEFFERIES, W. J. RICKER, AND B. STRAUB (Sydney, Australia)
Differential Properties of the Numerical Range Map of Pairs of Matrices 317

XUZHOU CHEN AND ROBERT E. HARTWIG (Raleigh, North Carolina)
On the Convergence of Power Scaled Cesáro Sums 335

J. J. MCDONALD (Regina, Saskatchewan, Canada), D. D. OLESKY (Victoria, British Columbia, Canada), M. J. TSATSOMEROS (Regina, Saskatchewan, Canada), AND P. VAN DEN DRIESSCHE (Victoria, British Columbia, Canada)
Ray Patterns of Matrices and Nonsingularity 359

AUTHOR INDEX 375